

Work Order ID 50105

July 08, 2009 11:19:58 AM

Page 1

Item ID: D3391-025 Accept Setup Start
Revision ID: H Stop
Item Name: Aft Tube Assembly
Start Date: 7/10/2009 Start Qty: 1.00 Cust Item ID:
Required Date: 7/31/2009 Req'd Qty: 1.00 Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3391	Rev H
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100

MORI SEIKI CNC LATHE LARGE

0.00

Mori Seiki

Memo

0.00

Mori Seiki CNC Lathe Large

Turn as per Folio FA599

Rev: AA & Dwg D3391 Rev: H

Q.M 09 - 07 - 14 0

110

QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

0.00

Quality Control

Q.M 08 - 07 - 14 0

111

QC8- Inspect parts - second check

0.00

QC

Memo

0.00

Quality Control

=> 50962/15

(40) 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	HAAS CNC VERTICAL MACHINING #1	0.00				1	0		
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine as per Folio FA 599 Rev: <u>H</u> 2-Deburr								
		M.A 09/08/11							
130	QC2- Inspect parts off machine FAI/FAIB	0.00				1	0		
QC	Memo	0.00							
Quality Control		M.A 09/08/11							
140	QC8- Inspect parts - second check	0.00				1	0		
QC	Memo	0.00							
Quality Control		09/08/11							

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Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Skidtubes	0.00				<u>D</u>			<u>11 9/8/18</u>
Skidtubes	Memo	0.00							
Skidtubes	1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803								
160	BENDING MACHINE - SKIDTUBES	0.00							
CNC Bend 1	Memo	0.00							
CNC Delta 100 Bender	Form as per Dwg D3391 Using Bend Prog 3391025								
170	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00				<u>20</u>	<u>0</u>		
Quality Control									

DD
9-8-18

⇒ 5 or 6/19

h=4.04

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00	=> 509/08/19			(44)	/		
200	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish Hand Finishing	Memo	0.00				(1)			11 9/8/19
210	QC3- Inspect Part Finish	0.00							
QC Quality Control	Memo	0.00				(A) BE			09/08/20

Dart Aerospace Ltd

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Cust Item ID:

Required Date: 7/31/2009 Req'd Qty: 1.00

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Reference:

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	QC3- Inspect Part Finish	0.00							
QC Quality Control	Memo	0.00	MD	09/10/29		X1			
260	HandFinishing	0.00							
HandFinish Hand Finishing	Memo 1-Install inserts as per Dwg D3391 2-Install Aft Cap as per Dwg D3391 A/ R Sikaflex-241/-291 m112391 Sikaflex expiry date: 10/20	0.00	MD	09/10/29		X1			
270	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00	2) S	02/14/03		(X)	f		

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Reference:

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

x

0.00

Packaging

0.00

0.00

Quality Control

09/11/03. A
MF
09-11-03

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Picklist Print

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Page 1

Work Order ID: 50105

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6014-090RevA		Manufactured	No			100	Each	22.0000	1.0000			

ALUMINUM EXTRUSION

Warehouse Loc Qty Loc Code

Location

Main Warehouse

LG

22

42768

22

D3670-4-200RevA

Manufactured

No

230

Each

179.0000 4.0000

①

SPACER

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

179

46106

16

47122

36

48198

42

48269

85

12

9/18/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID: 50105

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D2646RevC		Manufactured	No			270	Each	60.0000	1.0000			
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Aft Cap

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-------------------------------------	----------------	-----------------

Main Warehouse

ST	60	
20208	0	
43801	2	
46327	8	
48109	50	

D3537-1RevC		Manufactured	No			270	Each	86.0000	1.0000			
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Wearpad

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-------------------------------------	----------------	-----------------

Main Warehouse

FP	60	
48288	60	
Main Warehouse		
ST	26	
47715	1	
48162	25	

51624

X1 mtd 09/11/02

X1 mtd 09/11/02

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Shop Packet Print

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Work Order ID: 50105

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D3537-7RevC		Manufactured	No			270	Each	29.0000	1.0000			
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Wearpad

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-------------------------------------	----------------	-----------------

Main Warehouse

ST	29	
----	----	--

33869	1	
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45408	14	
-------	----	--

46346	14	
-------	----	--

D3553-1RevA		Manufactured	No			270	Each	24.0000	1.0000			
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Gasket

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-------------------------------------	----------------	-----------------

Main Warehouse

ST	24	
----	----	--

33868	24	
-------	----	--

D3553-3RevA		Manufactured	No			270	Each	13.0000	1.0000			
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Gasket

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-------------------------------------	----------------	-----------------

Main Warehouse

ST	13	
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33870	5	
-------	---	--

47206	8	
-------	---	--

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XI MD 09/11/02

XI MD 09/11/02

XI MD 09/11/02

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Work Order ID: 50105

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D3672-1RevB		Manufactured	No			270	Each	736.0000	2.0000			
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Phenolic Washer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

ST	736	
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39275	19	
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42329	143	
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47628	574	
-------	-----	--

ALS4-1032-130		Purchased	No			260	Each	7,799.000	14.0000			
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Insert

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

ST	7799	
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110511	7799	
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ALS4-1032-225		Purchased	No			270	Each	9,205.000	12.0000			
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Insert

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		

Main Warehouse

ST	9205	
----	------	--

107441	28	
--------	----	--

110768	9177	
--------	------	--

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---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN3C4A		Purchased	No			270	Each	274.0000	6.0000			
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BOLT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

112082

274

274

AN3C5A		Purchased	No			270	Each	546.0000	4.0000			
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Bolt

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

111424

111707

546

8

538

AN960C10L		Purchased	No			270	Each	4,998.000	10.0000			
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washer

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

103585

112116

4998

100

4898

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DART AEROSPACE LTD		Work Order: 50105
Description: Float Skidtube (412)		Part Number: D3391-3
Inspection Dwg: D3391	Rev: H	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
14.000	+/-0.010	14.000	✓			
3.500	+/-0.010	3.492	✓			
88.93	+/-0.030	88.930	✓			
44.995	+/-0.030	45.000	✓			
Ø3.200	+/-0.010	3.199	✓			
88.93	+/-0.030	88.930	✓			
Ø3.750	+/-0.010	3.750	✓			
30° x 160° chamfer	+/-0.010	30° x 160°	✓			

Measured by: G.m

Date: 09.07.14

Audited by: S

Date: 07/07/15

HAAS Section						
1.526	+0.000/-0.030	1.505	✓			
0.200	+/-0.010	0.201	✓			
7.500	+/-0.010	7.500	✓			
27.750	+/-0.010	27.750	✓			
31.750	+/-0.010	31.750	✓			
35.250	+/-0.010	35.250	✓			
3.300	+/-0.010	3.305	✓			
0.200	+/-0.010	0.201	✓			
3.520	+/-0.010	3.523	✓			
0.687	+0.010/-0.000	0.693	✓			
R0.062	+/-0.010	R0.063	✓			
Ø0.484	+0.005/-0.001	0.486	✓			

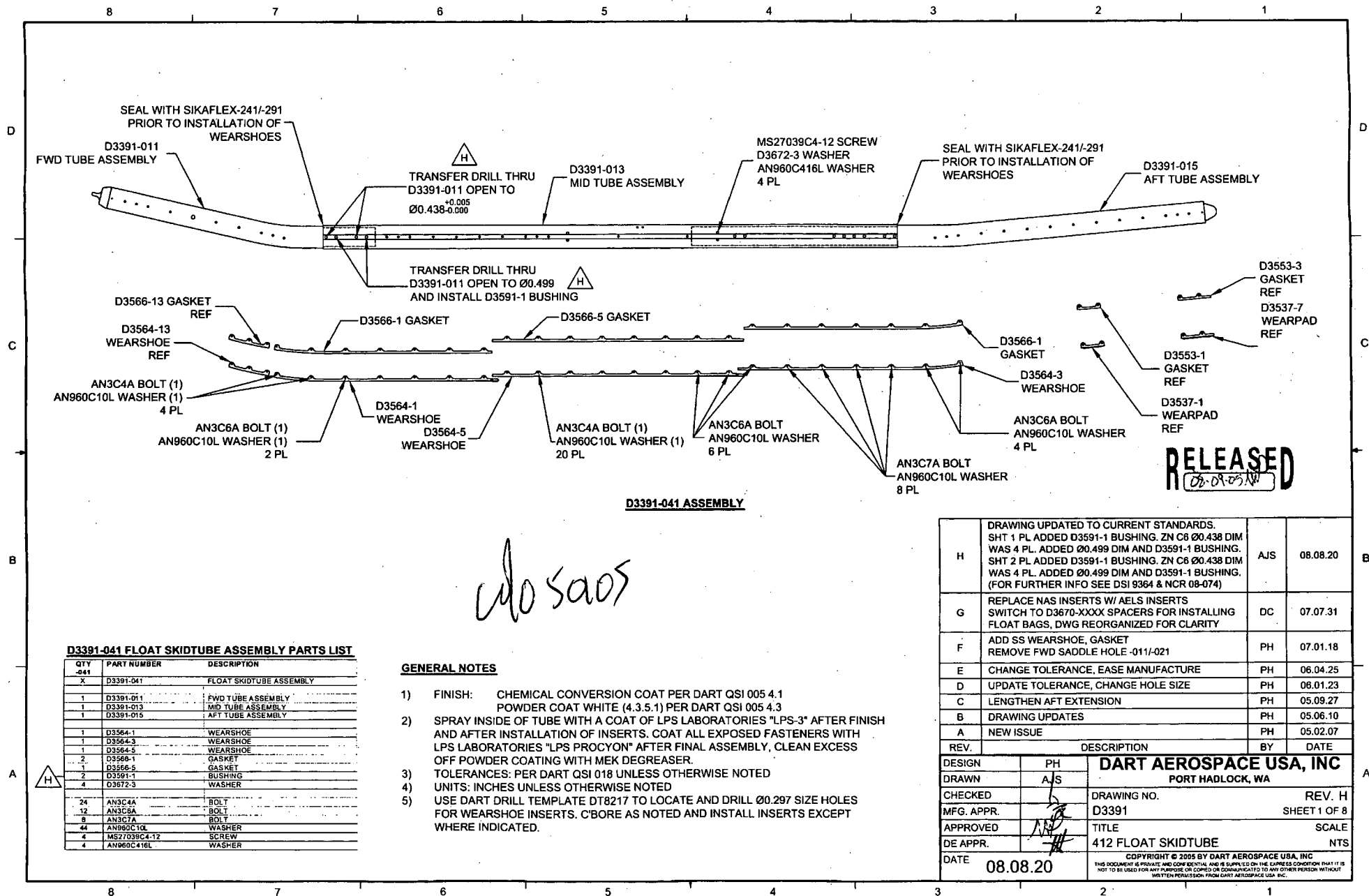
Measured by: M.A

Date: 09/08/11

Audited by: SA 09/08/11

Date:

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
B	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	



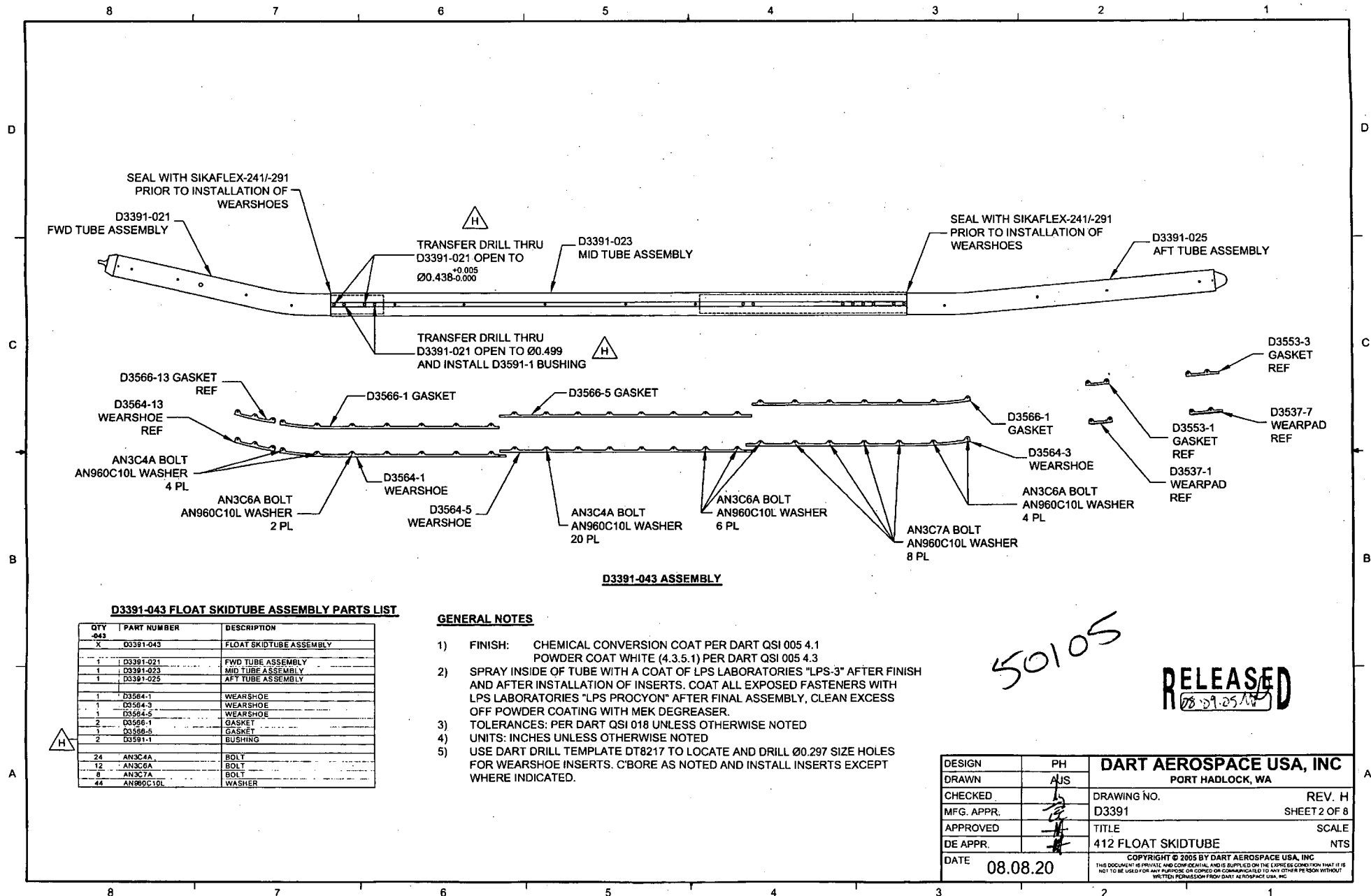
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



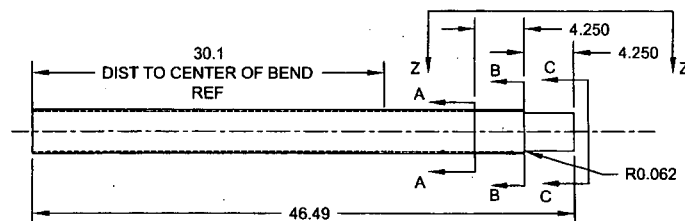
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

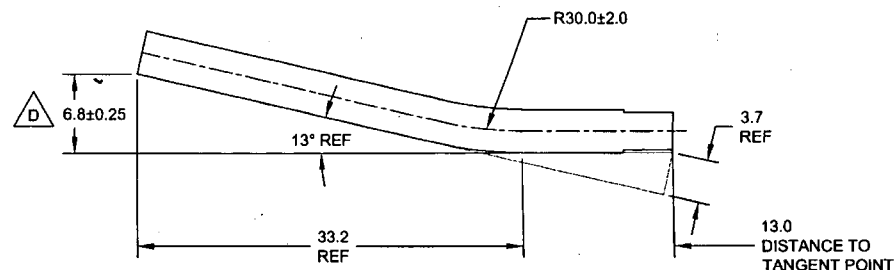
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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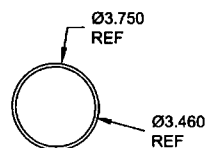
NOTE: Date & initial all entries



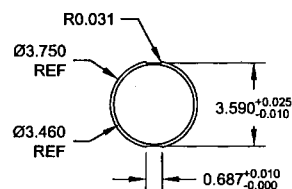
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



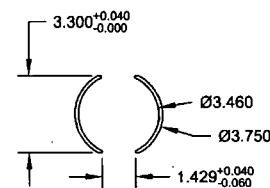
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



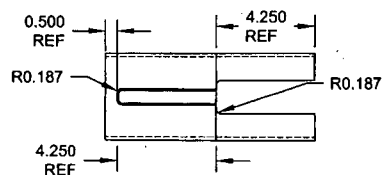
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
SCALE 2X



VIEW Z-Z
SCALE 2X

50105

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28-05-11

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MFG. APPR.		D3391	SHEET 3 OF 8
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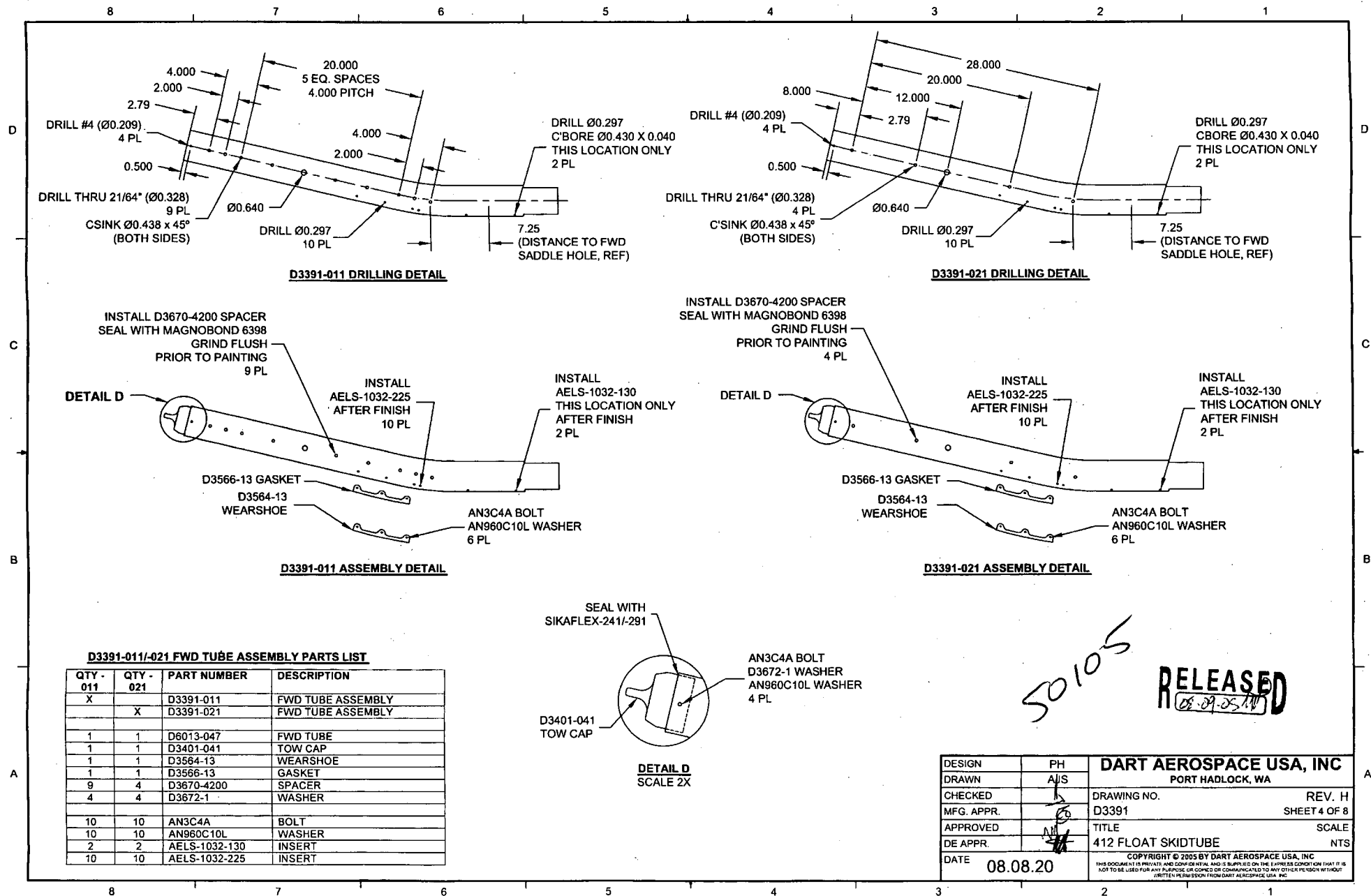
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



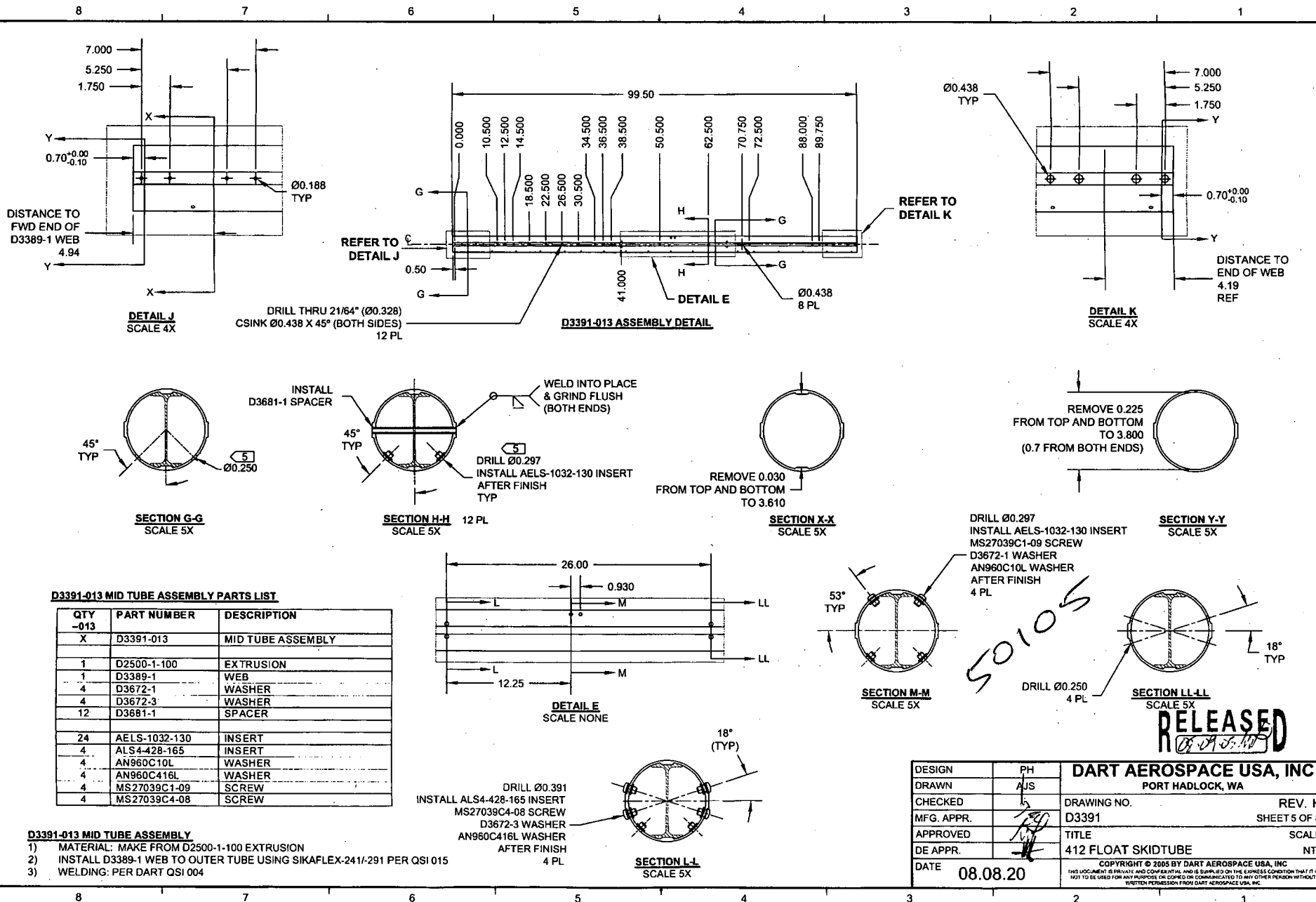
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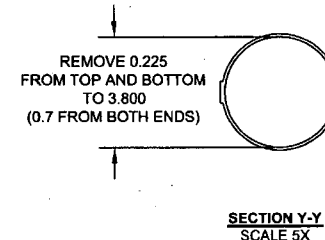
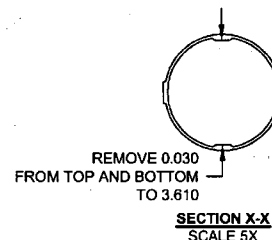
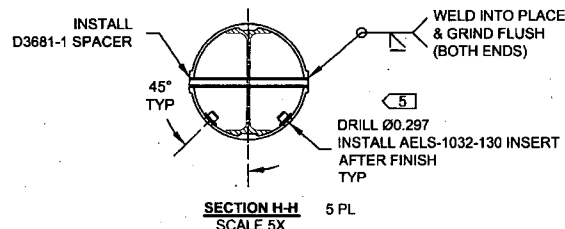
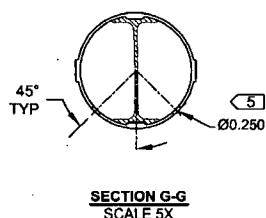
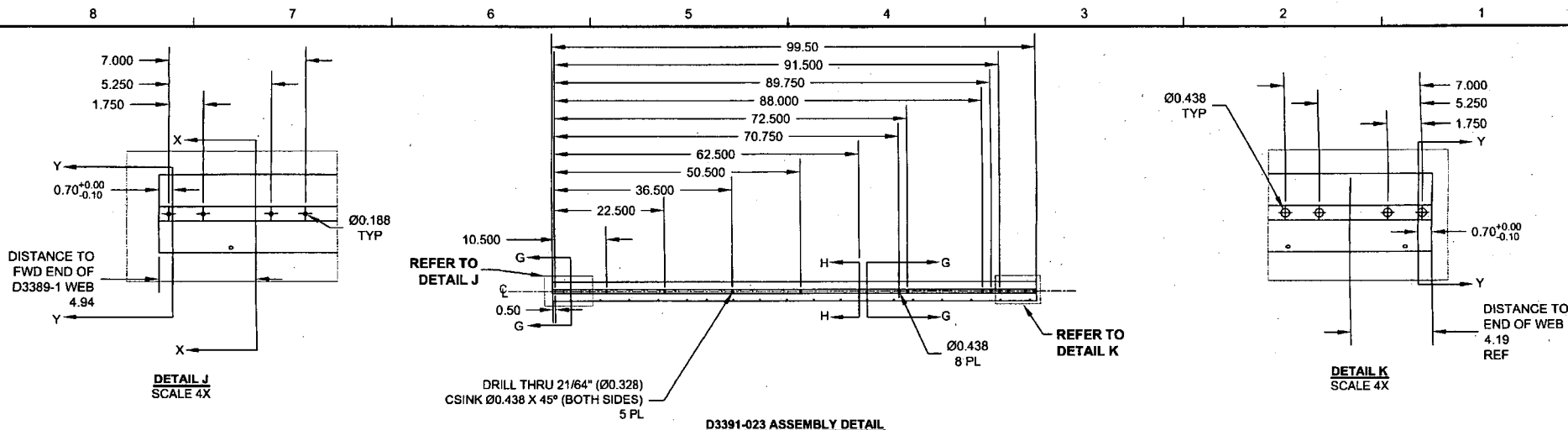
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D3391-023 MID TUBE ASSEMBLY PARTS LIST

QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

D3391-023 MID TUBE ASSEMBLY

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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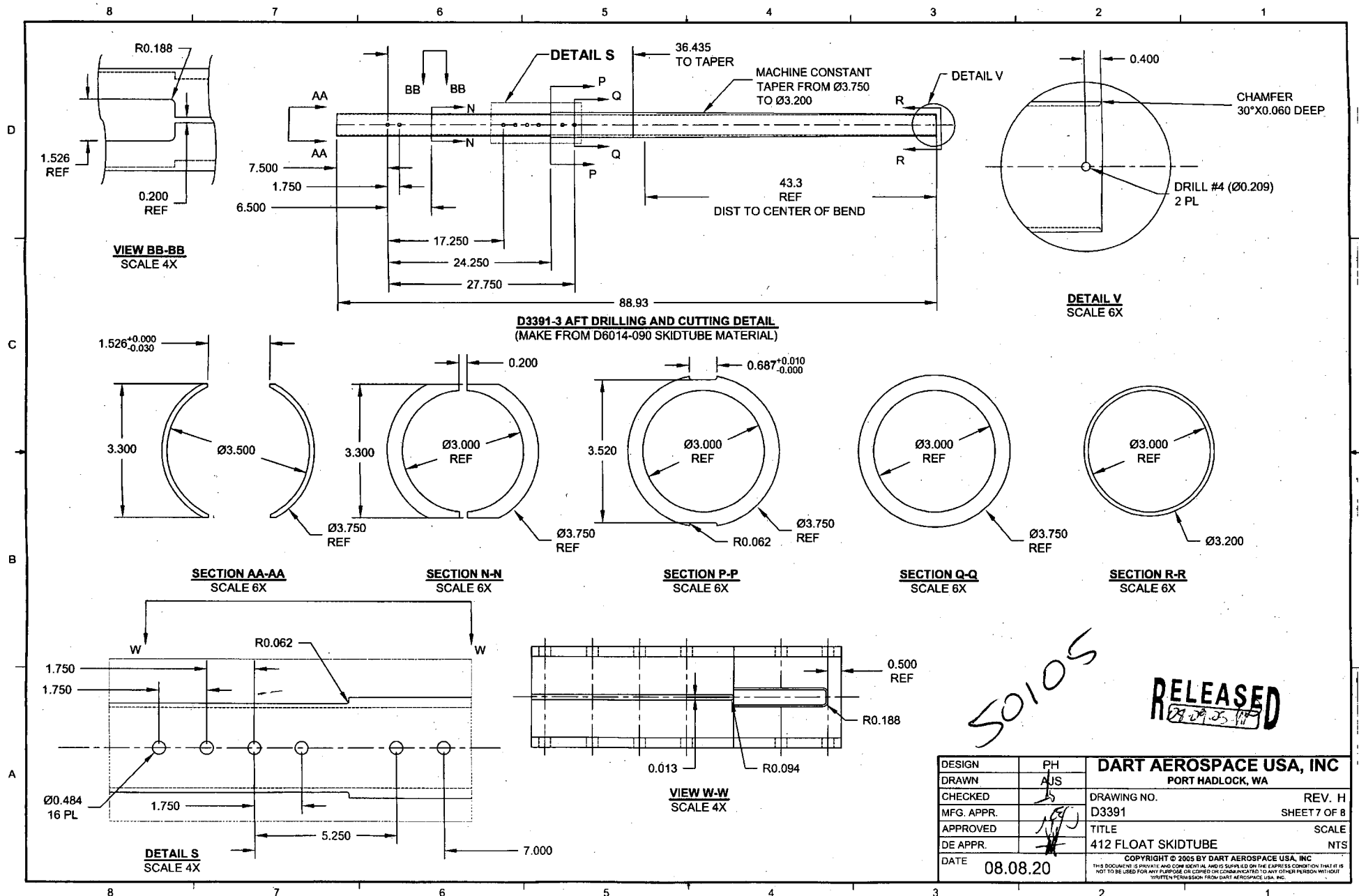
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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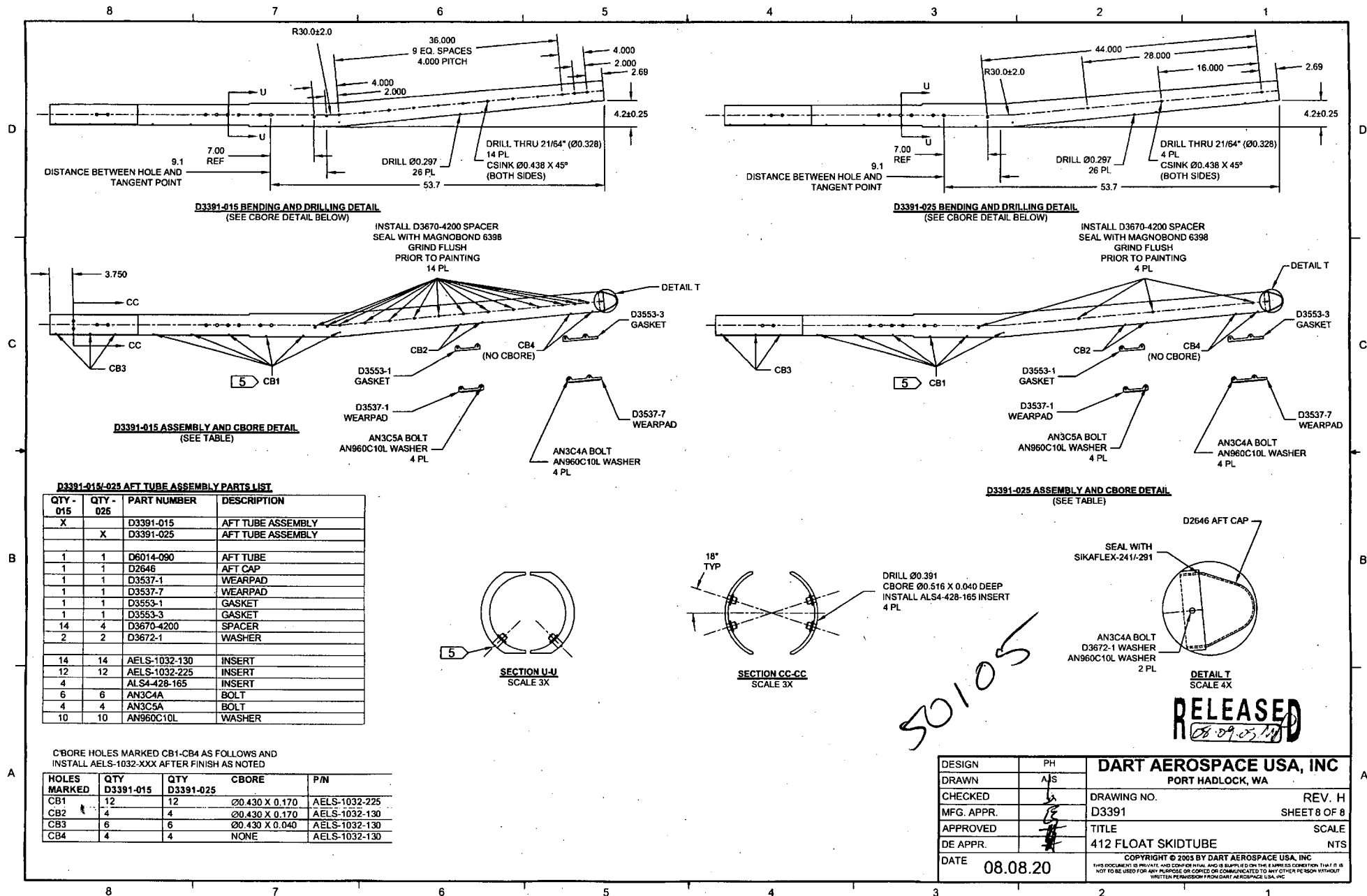
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